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1251 AVENUE OF THE AMERICAS NEW YORK,, NY 10020-1182			ART UNIT	PAPER NUMBER	
			2621		
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/771,214	CHITRADON ET AL.				
Office Action Summary	Examiner	Art Unit				
· ·	Patrick L. Edwards	2621				
The MAILING DATE of this communication app						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	rely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>05 Fe</u>	ebruary 2005.	+				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-8,10-22 and 24-28</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-8,10-22 and 24-28</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers		•				
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)⊡ Some * c)⊡ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
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Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)					
Paper No(s)/Mail Date 6) ☐ Other:						

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02-05-2005 has been entered.

Response to Arguments

2. The applicant's arguments, filed on 02-05-2005, have been fully considered. A response to these arguments is provided below.

Prior Art Rejections

Summary of Argument:

- 1) Applicant argues that—unlike maruyama—the claim recites a spatial database containing the vector data representing the point, line and polygon feature of the geographical elements derived from the satellite map images (remarks pg. 17).
- 2) Applicant admits that the base map database disclosed in Barros is analogous to the claimed geographical map image database, but argues that the database disclosed in Barros is not analogous to the spatial database of the present invention. Specifically, applicant argues that the topical database in Barros—which stores topical layer information such as rivers, streets parks, etc. (barros col. 11 lines 38-40)—is not analogous to the claimed spatial database because these elements are not stored as vector data. Applicant further notes that the term "vector data" does not appear anywhere in the database disclosed by Barros (remarks pg. 18 top paragraph).
- 3) Applicant argues that a geographical map image is not the same as spatial information (remarks pg. 18, second paragraph).
- 4) Applicant further argues the distinction between the types of data stored in the geographical map image database and the spatial database. Applicant argues that the Barros reference fails to cure the alleged deficiences of the previous combination of references (remarks pgs. 19-20)
- 5) Applicant argues that Barros does not teach the wavelet limitations (remarks pg. 21). <u>Examiner's Response</u>:
- 1) Applicant is reminded that the claim was rejected over a combination of references. It was not rejected over Maruyama exclusively. Applicant is further reminded that the claims are given their broadest reasonable interpretation, and that limitations from the specification are not read into the claims (MPEP 2111).
- 2) Applicant's argument has been fully considered, but is not persuasive. While Barros may not expressly use the term "vector data," the information from the Barros topical database qualifies as such. Applicant is reminded that claims are given their broadest reasonable interpretation, and that limitations from the specification are not read

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into the claims (MPEP 2111). Vector data is a very broad term. The information in the Barros topical database therefore qualifies as the claimed vector data. This is further explained in the below rejection.

- 3) Applicant's argument is unpersuasive. The argument first differentiates between raster images and geographical map images (remarks pg. 18 2nd paragraph, second sentence). The argument then proceed to equate the raster image with "spatial information" (the next sentence). Applicant then states that geographical map image is not considered spatial information (last sentence of the paragraph). To accept this statement leads us to the logically following conclusion that raster images are not geographical map images. This, of course, would contradict part (a) of the claim, which refers to a "geographical raster map" and states that "geographical map images contain individual raster images of the map." This line of reasoning forms a perfect circle and contradicts the plain language of the claim in the process. Accordingly, the argument is considered moot.
- 4) Applicant's arguments have been fully considered but are unpersuasive. The currently recited claims do not make a clear distinction between types of data. These problems are detailed in the below rejection. However, even if we assume *arguendo* that a clear distinction between data types is made, the Barros reference discloses this limitation. Applicant's arguments with respect to the Barros reference are mentioned above in part # 2, and are elaborated on further in the below rejection.
- 5) Applicant's arguments have been fully considered but are unpersuasive. The rejection is based on a combination of references, not the Barros reference alone.

Examiner Suggestions

- 3. Claims 1, 14, 15, and 28 would read more clearly with the correction of the following two informalities:

 Step (b) of these independent claim recites "transforming the raster images into wavelet data stream." The examiner suggests amending this limitation to recite "transforming the raster images into a wavelet data stream."
- Step (h) recites "analyzing user requirement." The examiner suggests amending this limitation to recite "analyzing a user requirement."

Steps (b-f) refer to both "wavelet data stream" and "wavelet data format stream." While it appears that these two phrases are referring to the same thing, it would clear up confusion if the claims were amended to use only one of these phrases, not both.

Appropriate correction is requested.

Claim Objections

- 4. The follow quotations of 37 CFR § 1.75(a) and (d)(1) provide the basis of objection:
 - (a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.
 - (d)(1) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description

so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See § 1.58(a)).

5. Claims 1-8, 10-22, and 24-28 are objected to under 37 CFR § 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

Part (d) of the independent claims refers to "the client side." This phrase lacks antecedent basis in the claim.

Referring ot part (j) of the independent claims, the metes and bounds of the phrase "retrieving information from said spatial database using metadata and geocode of the coordinate related with the geographical elements on the vector data" are not clear. Specifically, it isn't clear whether 'on the vector data' is referring to the coordinate or the geographical element. If this phrase is meant to modify the geographical element, then it isn't clear how a geographical element could be "on the vector data." Does this mean that the geographical element would be stored as vector data? Alternatively, if the phrase is meant to modify "metadata and geocode of the coordinate," then the applicant should amend the claim to add commas necessary to show that distinction. If this is meant to be the case, then it isn't clear how metadata and geocode of a coordinate is retrieved "on the vector data." Does this mean that the metadata and geocode of a coordinate is retrieved from the vector data?

For interpretation purposes, it will be assumed that "on the vector data" is meant to modify the "metadata and geocode of the coordinate," since this interpretation appears to be more consistent with applicant's disclosure than the alternative.

Referring to part (j), the phrase "vector data; data, said spatial database..." is non-sensical.

Referring to part (l) of the independent claims, the term "geographical information" is unclear. Is this referring to the vector data (stored in the spatial database), or the geographical raster maps stored in the geographic raster map image database?

Referring to the independent claims as a whole, the metes and bounds of term "spatial information" are not clear. Parts (a) - (f) recite raster map or satellite images—which can be interpreted as spatial information. Part (g), however, expressly differentiates the "raster image" from "spatial information. Thus, it is unclear what "spatial information" is referring to. The metes and bounds of the term are unclear.

Furthermore, the term "spatial information" is used inconsistently throughout the entire claim. The claim differentiates raster images (which are stored in the geographical map image database) from vector data (which are stored in the spatial database), but associates the term "spatial information" with both of them (e.g. in parts (g) and (k)). As a result, there are several lingering questions about the claimed term. For instance, is "spatial information" the same thing as vector data or raster map image data--which have at least been clearly differentiated from each other--or a totally separate type of data? Where is it stored? In looking to the specification for guidance, it appears that the claims should recite "spatial information and map viewer" and "spatial information and map editor", instead of "spatial information and a map viewer" and "spatial information and a map editor." Given the former interpretation, the claim would makes much more sense because the editor and viewer would then represent single entities for either displaying or editing maps and spatial information. Of course, this still leaves the sticky question

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of what is spatial information? Is it vector data or raster image data? But this is still better than the latter interpretation. Given this latter interpretation—which corresponds to the claims as currently written—there is no nexus between the spatial information and the map editor or view. Consequently, "spatial information" is even less definite.

In view of the above analysis, the claim will be interpreted to read "spatial information and map editor" and "spatial information and map viewer" instead of the alternative. Appropriate correction is required.

Also, "spatial information" as recited in part (g) lacks antecedent basis.

Referring to parts (i), (j), and (k) of the independent claims, the metes and bounds of the term "information" are unclear as currently recited. Part (j) recites retrieving information from the 'spatial database.' This is the same 'spatial database' that is dedicated to storing only vector data. Logically, any information retrieved from the spatial database is therefore vector data. Contrary to this logic, the claims expressly differentiate "information" from "vector data"—even though both are supposedly retrieved from a database containing only vector data—in parts (i) and (j), and in part (k). These contradictory limitations cannot co-exist.

The dependent claims are rejected because of their depency on the aforementioned independent claims.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama (US Patent 6,430,498 B1) in view of Budge (US Patent Publication 2002/0080408 A1), Ogawa (USPN 5,864,632), Ratnakar (USPN 6,278,432 B1), Yonezawa (USPN 6,542,191 B1), and Barros (USPN 6,307,573). Regarding claim 1:

As applied to step (a), Maruyama discloses retrieving geographical map images from an image storage database (col. 3 lines 35-65: The reference describes retrieving maps from a spatial information database).

As applied to steps (b)-(f), Maruyama discloses compressing data (col. 3 lines 49-52), and then sending it to the client side (col. 9 lines 5-27 with figure 9: The reference describes transmitting map information to a portable terminal (i.e. the client side)).

As applied to step (g), Maruyama discloses displaying raster images using one of either spatial information and a map viewer or spatial information and a map editor (col. 3 lines 50-64: The reference describes a portable terminal which is analogous to a map viewer as recited in the claim because it displays the spatial information (or "entire map data" as stated on line 61 of column 3)).

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As applied to step (h), Maruyama discloses sending queries to a spatial database based on user requirement (col. 5 lines 30-39 in conjunction with Figure 2: The retrieving conditions set by the user and shown in element 103 of Figure 2 as control input, are analogous to queries as recited in the claim).

As applied to step (i), Maruyama discloses retrieving vector data comprising of geographical elements from the database (col. 5 line 63 – col. 6 line 5: The retrieval of a route between a present place and a destination as disclosed in Maruyama is analogous to vector data comprising of geographical elements as recited in the claim in that data corresponding to distance and direction to a location is retrieved. This is further shown on lines 45-51 in column 6 of Maruyama).

As applied to step (j), the claim recites retrieving information from a spatial database using metadata and geocode of the coordinate related with the geographical elements on the vector data. In this particular environment, the term metadata simply means data that provides information about the image data that is being retrieved.

Maruyama discloses using metadata in the retrieval of map information corresponding to a certain location (col. 5 line 48 – col. 6 line 4: The location information, direction information and retrieval conditions as disclosed in Maruyama are all analogous to metadata as recited in the claim in that they are providing information about the image data being retrieved). Further, the geocode of a coordinate is defined as the demographic characterization of that particular locality. Maruyama discloses retrieving information about the movies, entertainment, business events, restaurants, etc. that corresponded to a particular locality (col. 3 lines 47-49).

As applied to step (I), Maruyama discloses a management information system (col. 9 lines 14-18 and Figure 9: The database management system disclosed in Maruyama is analogous to the management information system as recited in the claim). Although Maruyama does not expressly disclose that geographical information is stored in the management information system, any database management system would have to store geographical information in order to successfully serve the purpose of managing the database. Consequently, the storing of geographical information is inherent in the functioning of the management information system.

As applied to step (m), Maruyama discloses a spatial database that stores vector data (col. 9 lines 24-25: The map information as disclosed in Maruyama is analogous to vector data as recited in the claim).

As applied to step (n), Maruyama further discloses storing geographical map information (col. 3 lines 45-48).

The step (o)(a) limitation was discussed with respect to step (g) above.

The step (o)(c) limitation was discussed with respect to step (h) above.

The Maruyama fails to teach several elements required by the claim. The Maruyama deficiencies are as follows:

- (A) Maruyama does not disclose that the geographical map images contain individual raster images of the map divided from the whole sheet or satellite image. This limitation is recited at step (a) of the claim.
- (B) Maruyama does not disclose the compression and transmission method required by steps (b)-(f).

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(C) Maruyama does not disclose two separate databases (geographical map image storage database; spatial database) for storing two separate kinds of data (geographical raster map or satellite data; vector data). This limitation is recited in steps (a), (j), (m), and (n).

- (D) Maruyama does not disclose using a spatial information and map editor to edit information or vector data. This limitation is recited at step (k).
- (E) Maruyama does not disclose the zooming and panning functions required by step (o)(b).

Referring to deficiency (A), Maruyama fails to expressly disclose that the geographical map images contain individual raster images of the map divided from the whole map sheet or satellite image. Ratnakar, however, discloses retrieving individual raster images of the map divided from the whole map sheet or satellite image (Ratnakar column 3 line 53 - column 4 lines 7). The portion of an image or image "tile" as disclosed in Ratnakar is analogous to the individual raster images as recited in the claim. It would have been obvious to one reasonably skilled in the art at the time of the invention to combine the retrieving of portions of a larger map as taught by Ratnakar with Maruyama's method of retrieving map information based on location (Maruyama column 4 lines 6-9). Such a modification would have allowed for a method of only retrieving the map information that the user requires and therefore transmitting only the required amount of data across the network. This would have made for a more efficient system.

Referring to deficiency (B), Maruyama fails to expressly disclose the compression and transmission method required by steps (b)-(f) of the claim. Maruyama generally describes the compression of the image data and then the transmission of that image data over a network to the client side, but fails to teach all the required limitations. Budge, on the other hand, discloses a method for compressing images for the purpose of transmission over a network and then reconstructing the image at the remote location (Budge paragraph 34 lines 1-7). Budge discloses transforming raster images into wavelet data stream, which is completely retransformable back to the original raster images (Budge paragraph 34 line 7 – paragraph 35 line 4). Budge also discloses compressing the wavelet data format stream into the compressed data stream (Budge paragraph 36 lines 4-11) and then transmitting the compressed data stream over a network to the client side (Budge paragraph 34 lines 5-7). Budge also discloses decompressing the compressed data stream into wavelet data stream and then retransforming the wavelet data stream into the raster images (Budge paragraph 88 in conjunction with Figure 8). It would have been obvious to one reasonably skilled in the art at the time of the invention combine the method of transforming an image into wavelet data, compressing the wavelet data, transmitting the compressed data over a network, decompressing the data into wavelet data and then retransforming the wavelet data back into image data as taught by Budge with Maruyama's broadly stated compression and transmission system. Such a modification would have allowed for a fast, efficient method of compressing image data (Budge paragraph 10 lines 6-10) that is well known in the art as a way to speed up the transmission of image data over a network (Budge paragraph 4).

Referring to deficiency (C), Maruyama fails to disclose the limitation of two separate data bases (i.e. a spatial database for storing vector data and a geographical map image storage database for storing geographical map images). Maruyama simply describes a single spatial database for storing spatial information. Barros, on the other

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hand, discloses a base map database which stores the base map elements (col. 11 lines 33-35). This base map database disclosed in Barros is analogous to geographical map image database recited in the claims.

Barros further discloses a topical database which stores the topical layer information (Barros col. 11 lines 38-40). This topical layer information comprises geographical elements such as rivers, streets, parks, etc. (Barros col. 11 lines 28-31) The reference describes the aforementioned geographical elements, but does not refer to them as "vector data." This is irrelevant. "Vector data" is a broad term, and the information in the Barros topical layer database qualifies as vector data for several reasons. First of all, the topic layer database is comprised of onedimensional arrays (as can be seen at figure 2b and elsewhere throughout the disclosure). One of the art accepted definitions of the word 'vector' is a one-dimensional array. Since the database is comprised of one-dimensional arrays, it qualifies as the claimed 'vector data'. Additionally, Barros discloses that the database is filled with geographical elements. Applicant aptly stated that "All geographical elements must be converted into vector data to enable the computer to calculate the relationship between each geographical element (applicant's remarks pg. 19 and elsewhere). This statement nicely illustrates that vector data—though not expressly stated in the disclosure—is implicitly disclosed in the teachings. Accordingly, the topical database disclosed in Barros qualifies as the spatial database recited in the claims. It would have been obvious to one reasonably skilled in the art at the time of the invention to section off the Maruyama's single database into two separate databases as taught by Barros. Such a modification would have allowed for a more optimized system that organized complex information sets and to provide information to the user in a faster and more comprehensible manner (Barros col. 4 lines 11-14 and 47-52).

Referring to deficiency (D), Maruyama fails to expressly disclose means for editing information or vector data using spatial information and a map editor. Ogawa, however, discloses editing map information using spatial information and a map editor (col. 2 lines 8-14). The image obtained by imaging the area as disclosed in Ogawa is analogous to spatial information as recited in the claim. It would have been obvious to one reasonably skilled in the art at the time of the invention to combine the map editor as taught by Ogawa with Maruyama's map viewing and navigation system. Such a modification would have added the extra functionality to Maruyama's system by allowing the map image data to be altered as well seen and utilized. This would have made for a more dynamic system that could be updated to keep all the information current (Ogawa col. 1 lines 57-61).

Referring to deficiency (E), Maruyama fails to expressly disclose the limitation recited in step (o)(b) that the user controls the zooming and panning of the image. Maruyama discloses that the user controls conditions related to the display of map image data, but does not expressly mention zooming and panning as possible functions. Yonezawa, however, discloses receiving user input (the user inputs information using various buttons as described on column 6 lines 55-57 of Yonezawa) to control the zooming and panning of a map image. It would have been obvious to one reasonably skilled in the art at the time of the invention to combine the user controlled panning and zooming functions as taughty by Yonezawa with the user controlled map display system taught by the Maruyama. Such a modificatin would have added an extra feature to a map display system and would have made such a system more robust, operable, user friendly and generally useful (Yonezawa col. 1 lines 40-42).

Regarding claim 15:

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The combination of Maruyama, Barros, Budge, Ogawa, Ratnakar, and Yonezawa further discloses a means for performing the steps of the method (see e.g. figures 9 and 10 of Maruyama).

Regarding claim 28:

The combination of Maruyama, Barros, Budge, Ogawa, Ratnakar, and Yonezawa further discloses that the spatial information and map editor is an apparatus (see Ogawa col. 2 line 9).

Regarding claim 14:

The combination of Maruyama, Barros, Budge, Ogawa, Ratnakar, and Yonezawa further discloses the editing of map data, allows for a user to change query information, discloses a management information system, a spatial database and a geographical map image storage. The further limitations are all inherent given a system such as this. The changed user information would have to be stored in the management information system because the management information system determines what image data is sent to the user for display. In addition, the changed vector data would have to be stored in the spatial database since the spatial database is responsible for storing the vector data portion of the image. Further, the new geographical image map data would have to be stored in the geographical map image storage given that the geographical map image storage is responsible for storing this portion of the image.

Regarding the dependent claims:

With regard to claims 2 and 16, Murayama discloses a geographical map in the form of map information (Murayama column 3 line 46). This is a form of a map.

With regard to claims 3 and 17, Budge discloses a wavelet transformation used to transform a map into various resolutions (Budge paragraph 9 lines 8-9).

With regard to claims 4 and 18, the claim recites that the various resolution maps can be filtered for only the desired resolution. Given a system with a map viewer that displays an image at a given resolution and a wavelet transform used to transform a map into various resolutions, the filtering of the various resolution maps for only the desired resolution is inherent.

With regard to claims 5 and 19, Budge further discloses that filtered maps are compressed by using compression algorithms (Budge paragraph 52).

With regard to claims 6 and 20, Maruyama further discloses using an internet network to transfer compressed data (Maruyama element 65 of Figure 9).

With regard to claim 7 and 21, Budge further discloses the decompression of compressed data into wavelet data format (Budge paragraph 88).

With regard to claims 8 and 22, Budge further discloses that wavelet format data is retransformed into a digital image such as a geographical map (Budge paragraph 88).

With regard to claims 10 and 24, steps (a) and (d) have already been addressed above. The claim further recites storing map geocode that links to the information in the MIS. The use of geocode has already been addressed with respect to claim 1. Arguments have also been made above with respect to a spatial information database that stores data such as geocode and an MIS (referred to as database management system in Maruyama) that manages the

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information stored in the spatial database. As a result, geocode stored in a spatial database inherently links to the information in the MIS. In addition, sending geocode to the MIS information is also inherent in such a system.

With regard to claims 11 and 25, the use of metadata in the retrieval of information from the spatial database has been addressed with respect to step (j) of claim 1.

With regard to claims 12 and 26, it is well known in the art that the term "metadata" refers to data which explains the meaning of data as well as its logical structure. This has been addressed above with respect to step (j) of claim 1.

With regard to claims 13 and 27, the claim recites that the required data is compressed and sent back to the client. The compression of data for the purpose of sending the data to a client has been addressed above with respect to claim 1.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L. Edwards whose telephone number is (571) 272-7390. The examiner can normally be reached on 8:30am - 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick L. Edwards

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ANDREW W. JOHNS PRIMARY EXAMINER

Mulbu